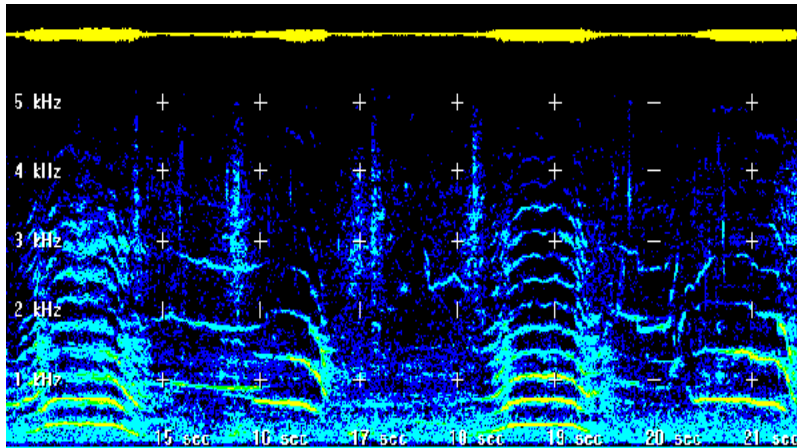


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Sound and Marine Mammals: Providing An International Analytical Framework



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The views expressed in this speech do not necessarily represent those of the U.S. Government, the Department of Commerce, or NOAA.

Presentation Objectives



1. *Not* advocate taking action now through an int'l instrument/fora
2. Provide an analytical framework for considering int'l instruments and fora
3. Set out questions that should be addressed
4. Challenge certain assumptions

Overview of Presentation



1. Clear Objectives Needed
2. International Solution and Tools
3. Available Instruments
 - Types
 - Are they effective?
 - If not, then what?
4. International Fora
5. Where to from here?
6. Conclusion

Clear Objectives Necessary: *Why?*

- Frame issues (e.g., science needs, identify sources of sound of interest)
- Define/refine appropriate solutions, guide development of strategy to achieve them, and provide reference point to determine success
- Identifies relevant institutions & instruments
- Ensures right players are at the table



Clear Objectives Necessary: *How?*



- *Do not assume the outcome of objectives, including that a command-and-control approach is necessary*
- Get all interested entities involved in framing objectives and attempt to get agreement on a way forward: gov'ts, policy analysts, NGOs, IOs, industry, biologists, and attorneys

Clear Objectives: *What?*

General Objectives?

“Define potential adverse impact of sound on marine mammals”

“Develop mitigation strategies to address potential adverse impacts of sound on marine mammals”

“Prevent, minimize, and, where possible, eliminate adverse impacts of sound on marine mammals”



Clear Objectives: *What?*



Specific Objectives:

*“The Devil and
Difficulties are in
the Details”*

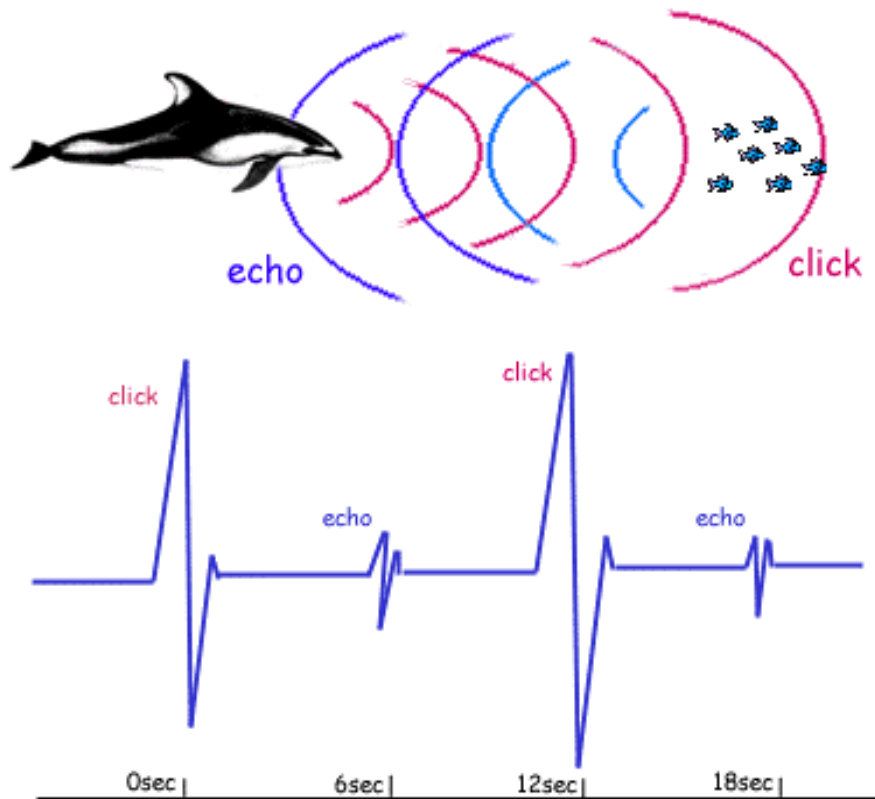
Where is the focus? On
the sources of sound
or on marine
mammals,
ecosystems, habitats,
or specific areas?

Clear Objectives: *What?*

- Sound:
 - Are all sources of sound of interest or are there priorities?
 - Technological solution?
 - Specific decibel levels?
 - Affect duration, frequency, locations, intensities?
 - Prohibit certain activities while not others?
 - Largest overall source of sound v. loudest?
 - Cumulative v. sporadic and localized events?



Clear Objectives: *What?*



- Biological issues:
 - Behavior or physiological effects?
 - How define ecosystems, habitat, areas? What animals covered?
 - Determination of impacts?
 - Focus on select species w/known sensitivities?
 - How address uncertainties, lack of data, and unknowns?

Clear Objectives: *What?*

- Broad categories:
 - Operational Measures
 - Research
 - Outreach & Education
 - Coordination, cooperation, exchange of information



Clear Objectives: Overcoming the Difficulties



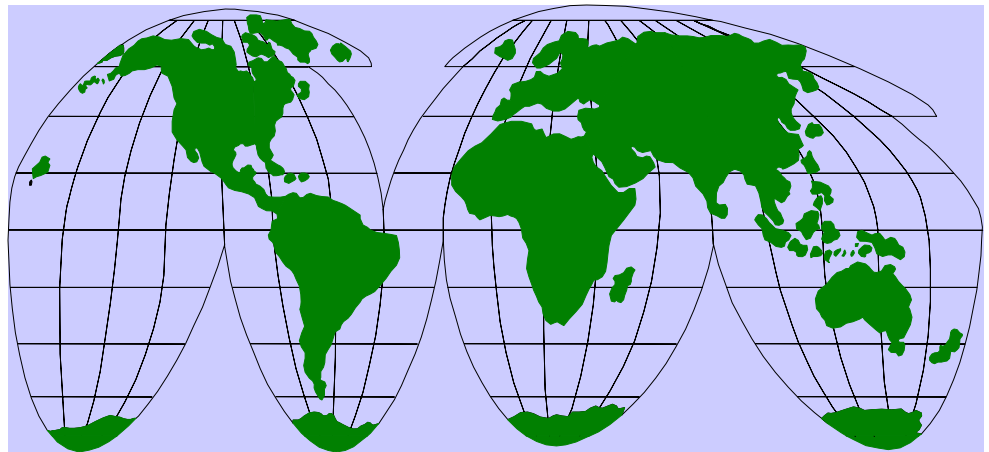
- Sound producers and biologists need to understand each other and then try to formulate common objectives
- Recognize that sound, animals, and ecosystems cross jurisdictional lines
- Avoid tunnel vision (land-based, sound and humans)

International Solutions: *Only Option v. “Don’t Fence Me In”*

Once objectives defined,
action may take place
at various levels and
with various tools

A. Levels:

1. *International:*
transboundary
(sound, animals,
ecosys), varying
actors, UNCLOS



International Solutions: *Only Option v. “Don’t Fence Me In”*



2. *Regional*: more focused, less parties to get agreement, some areas not affected by noise outside area

3. *National*: Address sound sources w/n jurisdiction, take action in certain areas more easily and faster, potentially less constraints

International Solutions: Possible Tools for Actions

B. Tools for Action

1. Hard law (treaties, regs)
2. Soft law (resolutions, guidelines)
3. Research, cooperation, coordination
4. Outreach and Education (info papers, industry reps, Notices to Mariners)



Instrument to Achieve Objectives?

Types:

A. UNCLOS

- Constitution--
FRAMEWORK
- jurisdictional areas
impact any actions
taken (port entry v.
transiting ships)
- Part V (e.g., Art 56, 65)
- Part XII (e.g, Arts 192,
194, different pollution
sources)



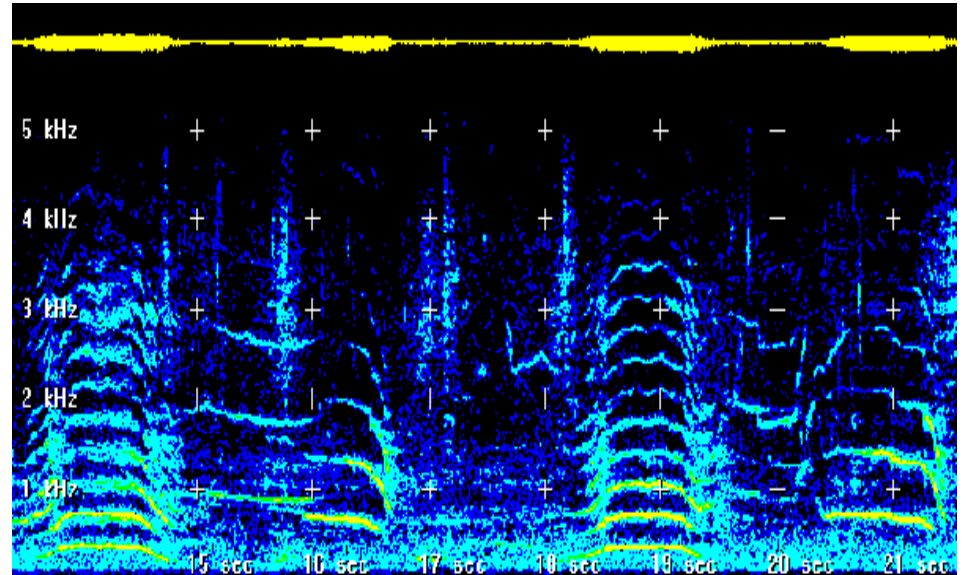
Instrument to Achieve Objectives?



- UNCLOS Pollution definition: A necessary conclusion?
 - “pollution of the marine environment” means the introduction by man, directly or indirectly, of **substances or energy** into the marine environment ...which results or is likely to result in such **deleterious effects as harm** to living resources and marine life... ” Art (1)(4).

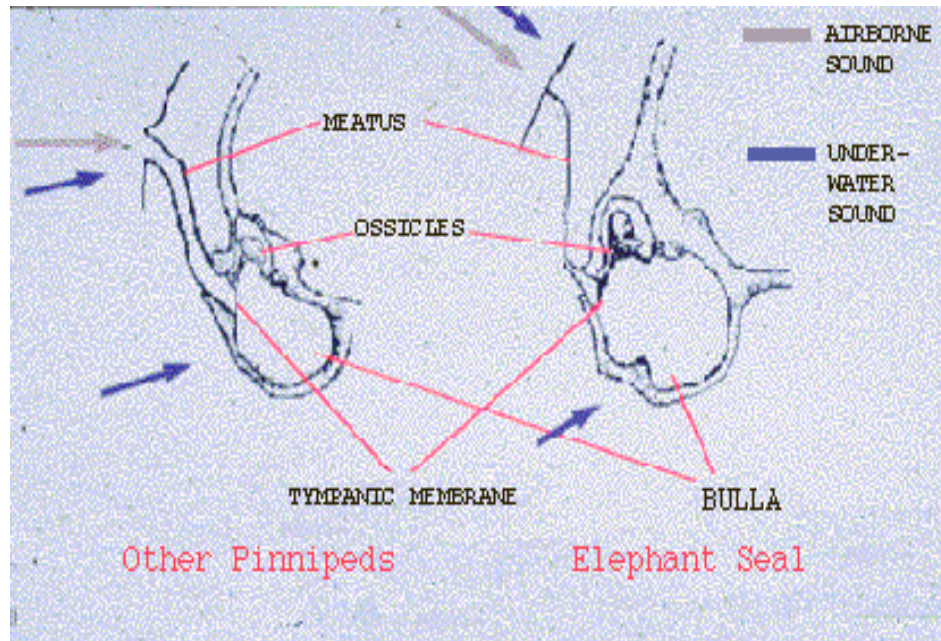
Instrument to Achieve Objectives?

- Noise as “pollution”?
 - Based on GESAMP
(energy=thermal waste; not noise)
 - Objective, scientifically based or manipulated to reach policy conclusion?
 - Defined as pollution (Part XII), or resources management (Part V), or both
 - *Why yes?* Can be argued w/n UNCLOS definition, focuses attention, must do something, pollution is bad



Instrument to Achieve Objectives?

Why not?



- Burden of proof
- Lack of baseline data to determine when reaches level to become legally significant
- One ship? One blast? Cumulative?
- Pollution experts not necessarily experts in this issue
- Pollution treaties/fora not necessarily most appropriate (MARPOL v. SOLAS)
- Focuses on source, not animal
- Potentially reduces flexibility (e.g. Art. 211(5) v. Part V “fishing”)

Instrument to Achieve Objectives?

Types con't

2. IMO Instruments

- MARPOL (6 annexes, however, ANS & AFS)
- SOLAS
- PSSAs: *still need clear legal basis for a measure in another instrument!*



3. Conservation Treaties

- IWC -- CBD
- UNEP Reg'l Seas

4. Regional Agreements

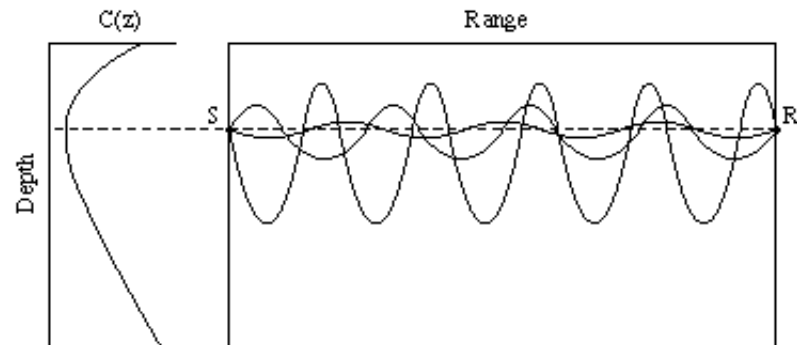
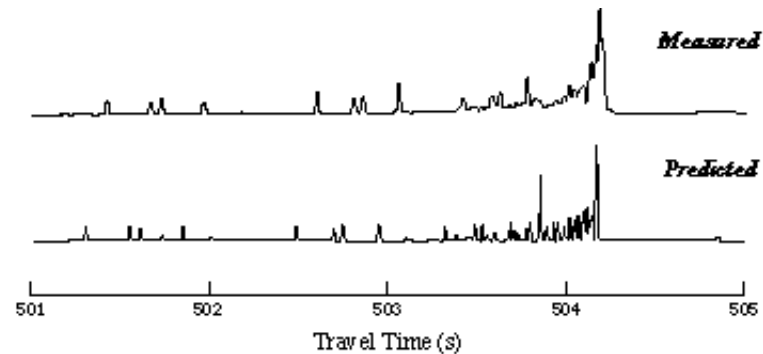
- ASCOBANS --AEPS
- ACCOBAMS



International Instruments: *effective to achieve objectives?*

1. Need to look at instruments in light of objectives
2. Precise wording of agreement
 - Framework instruments
 - General language, not specifics
 - Ability to change behavior, enforceability
3. Piecemeal approach
4. Area Approach

Bottomline: Provide avenues, yet further work needed if objectives call for action



If no internat'l instrument or they are not effective, then what?



Two options:

1. Amend existing instrument:
 - once objectives defined, may be easier
 - procedural issues important, especially amendment process
 - still piecemeal and results difficult to track

If no internat'l instrument or they are not effective, then what?

2. Create new instrument:
 - New agreements possible (UNCLOS Arts 237, 311)
 - Positive in that varying sources covered in one instrument and could cover new sources of sound as they emerge
 - Difficult in that must identify fora and one fora does not cover all sound sources, must be able to articulate clearly the need, develop political will, overcome controversies, engage stakeholders, resources



If no internat'l instrument or they are not effective, then what?



- Other considerations:
 - Need to make priority w/n nat'l gov'ts, IOs, and could take substantial resources
 - Sovereign immune provisions common in international treaties
 - Some sound sources not subject to much international oversight (e.g., oil and gas industry)
 - Lowest Common Denominator

International Fora: May depend on objectives



If one exists, there are the following considerations:

- getting IO to take ownership or if several, leadership role
- making priority against competing priorities (difficult esp if there are uncertainties, controversy involved, and no clear solution)
- delegations may not include interested entities (e.g., IMO maritime reps v. biologists)
- difficulties getting issue on agenda, rules of procedure
- what actions are possible (soft law, hard law, only research?)
- Timing considerations

International Fora: May depend on objectives

If no IO exists or desire for one IO
to address overall issue, then
what?

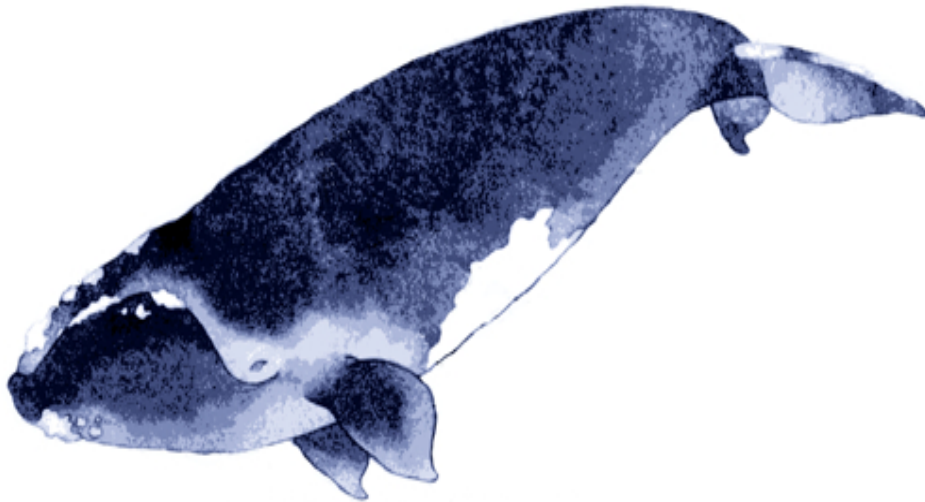
--UNGA or UNCLOS parties
for new issues, including this
one?

Action may also be possible
through industry NGOs

*Bottomline: Fora with
regularly scheduled
meetings working on
an issue can facilitate
action*



Where to from here?



1. Short-term:

- objectives, priorities, strategy developed
- "low hanging fruit" (e.g., guidelines for ship manufacturers?)
- info dissemination and exchange
- research priorities
- ideas from handling on land
- technological advances

Where to from here?

3. Longer-term:

- monitor progress on objectives, priorities, and strategy
- research and monitoring
- based on science, determine possible mitigation techniques
- pursue objectives through appropriate fora and with various types of tools



Conclusion

1. Need clear objectives, priorities, and strategy to proceed
2. Depending on those objectives, action should be taken at the appropriate level (int'l, reg'l, nat'l) and with various tools (eg., soft law, hard law, outreach and education, research, cooperation)
3. Look at international instruments and, in light of objectives, determine



Conclusion

desired actions

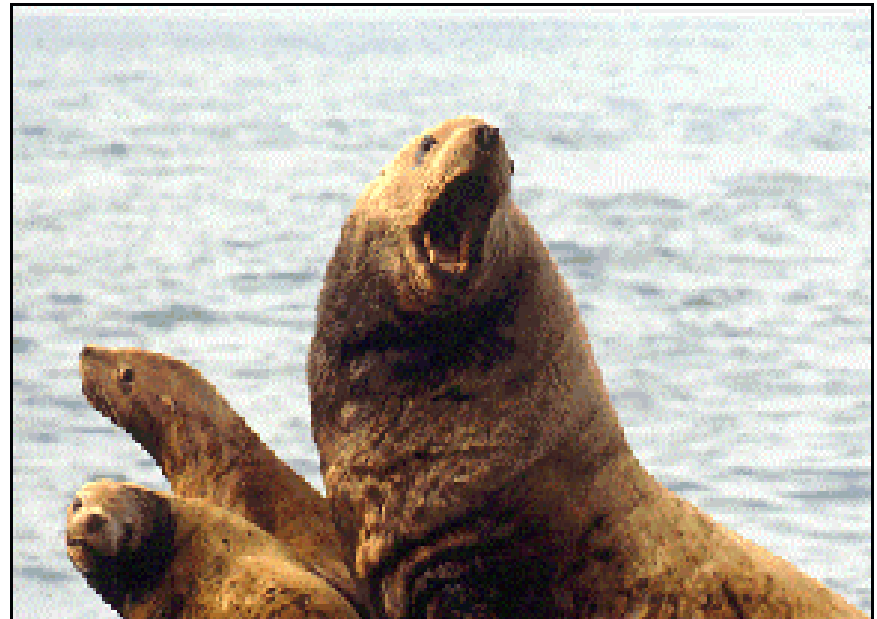
- take into account framework instruments, general principles
- do not necessarily “pigeonhole” issue as pollution because it reduces flexibility

5. Determine whether there is an appropriate IO
 - recognize potential hurdles and establish a strategy to proceed



Conclusion

The issue is not going away and the best way to proceed is by working together to define common objectives, priorities, and a strategy to proceed.



Thank you.